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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/158,549	09/22/1998	JOHN S. HENDRICKS	5515	4086

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EXAMINER

BROWN, RUEBEN M

ART UNIT PAPER NUMBER

2611

DATE MAILED: 11/20/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/158,549

Applicant(s)

HENDRICKS ET AL.

Examiner

Brown M. Reuben

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 9/6/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 16-21 & 27-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florin, (U.S. Pat # 5,621,456), in view of Handelman, (U.S. Pat # 5,715,315).

Considering claim 1, the claimed hardware upgrade for enhancing the functionality of a set top box STB in a TV delivery system, such that each STB has a mailbox for receiving e-mail, Florin discloses an interactive CATV system that enables a subscriber to transmit/receive e-mail services at a audio-visual transceiver 54, i.e. STB, see Florin col. 22, lines 20-30. As for the step

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comprising an interface for providing an electrical connection to the STB, whereby the e-mail is transferred from the STB for processing and the processed e-mail is passed to the STB for display, Florin does not discuss any details of the processing of the e-mail services.

However, the disclosure of Handelman teaches that e-mail data may be transmitted from the CATV interface unit 18 to an external memory unit 38, (Fig. 2; col. 6, lines 24-26). E-mail data then may be retrieved from external memory unit 38 passed through the STB and displayed on the TV receiver, col. 6, lines 38-45. It would have been obvious for one ordinary skill in the art at the time the invention was made to modify Florin with the teachings of Handelman, at least for the desirable advantage of making more memory available through the external memory unit.

The claimed memory for storing interactive programming instructions reads on Florin, col. 8, lines 52-55 and is necessarily included in Handelman, which is directed to a CATV system that provides interactive programming to subscribers, (col. 1, lines 61-67 & col. 9, lines 15-25). Moreover, Handelman discloses that the processor 34 controls the operation of the STB/CATV interface unit 18; see col. 6, lines 34-36.

Also the claimed at least one microprocessor connected to the memory and connected to the interface for accessing the stored interactive programming and for processing the e-mail to produce processed e-mail based on the stored interactive programming instructions reads on the operation of the CPU 63 in Florin and the processor 34 and processor 156 of Handelman; see col. 6, lines 34-36 & col. 8, lines 38-67.

Considering claims 2, 17, 28, 32 & 37, Handelman discloses that video data may be transmitted to the CATV unit 18 in MPEG format, which reads on digital video; see col. 6, lines 15-21. Also Florin discusses the use of digital video at col. 9, lines 35-40.

Considering claims 3 & 18, since the two known methods for data transmission are serial or parallel, Handelman utilizes either technique to transmit the data between the CATV unit 18 and external memory unit 38.

Considering claims 4 & 19, the instant claim calls for subscriber input, including textual information that is used to produce the processed e-mail for display. Florin & Handelman discuss that a remote control is used to select an information display channel or non-CATV data display option. Moreover, Handelman teaches that the STB may be connected to a keyboard, thereby enabling the input of textual information.

Considering claims 5, 20, 30, 34-35 & 38-40, Florin (col. 11, lines 29-40; col. 23, lines 60-66; col. 24, lines 11-65) & Handelman (col. 1, lines 61-67) disclose interfacing with on-line databases, interactive services and message services and using a telephone modem. Thus the two-way communication reads on the user communicating with an intermediate CATV headend or more central facility.

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Considering claims 6 & 21, the claimed memory for storing the processed e-mail is met by the external memory unit 38 or internal memory unit 36 of Handelman; see Fig. 2.

Considering claims 16, 31 & 36, the claimed method for enhancing the functionality of a STB comprises steps that correspond with subject matter mentioned above in the rejection of claim 1, and is likewise treated. As for the additional features recited in claim 36, all subject matter is necessarily included in Handelman.

Considering claim 27, the claimed method steps of providing e-mail service to subscribers corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise treated. Claim 27 includes the additional limitation of the menu control information being generated at an operations center and transmitted to the cable headend before transmission to the subscriber. Official Notice is taken that at the time the invention was made, it was known in the art to utilize intermediate CATV stations. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate the combination of Florin & Handelman in a manner wherein data generated at a central location and transmitted to an intermediate CATV headend, before transmission to the subscriber, at least for the purpose of dispersing the data to a wider range of subscribers, other than those on the range of a particular intermediate CATV headend.

Considering claim 29, the operation of the headend in Handelman reads on the recited subject matter.

4. Claims 7-9 & 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennington, (U.S. Pat # 6,331,877).

Considering claims 7-8, the amended claimed advanced STB for use with a TV program delivery system comprising memory for storing menu content information reads on Bennington, (Abstract, lines 5-8). The claimed receiver for receiving digitally compressed program signals and a control information stream, wherein the control information stream comprises a description of the contents of the program signals received with the control information stream, commands to be sent to the STB and transmission information of the control information stream is met by Bennington, (col. 6, lines 40-62). The claimed control information comprises a description of the contents of the program reads on the EPG data transmitted in Bennington. It is also disclosed that application software for implementing the EPG at the user site, which reads on commands sent tot the STB. The transmission information of the control information reads on whatever method the data is transmitted includes its own unique characteristics that distinguishes it from the other transmission algorithms. For instance EPG data transmitted as part of the VBI is obviously different and requires a different extraction method than if the EPG data is transmitted on a dedicated channel, for instance.

Moreover, with respect to the claimed limitation of the digitally compressed program signals being received with the control information stream, even Bennington discloses that the EPG data stream may be transmitted to the user using numerous other transmission schemes only

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two are explicitly discussed. Namely using a dedicated channel or in the VBI of TV program. Using the VBI of a TV program generally requires an analog TV signal, whereas using a dedicated channel would not allow the data stream to be sent with the program signal, unless program signals were also being transmitted on another channel. Official Notice is taken that at the time the invention was made, it was well known in the art to transmit a plurality of signals to subscribers simultaneously using multiple frequency channels. In fact, in Bennington the 75 MHz receiver is different from the tuner 28 used to receive TV programs, see Fig. 1. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate Bennington in a manner wherein multiple signals are simultaneously transmitted, at least for the known advantage of most efficiently making the EPG data available for the subscriber.

The claimed signal processor connected to the memory and receiver for processing the control information stream to produce processed control information, such that the processed control information is used to update the stored menu content information, producing updated menu content information is met by Bennington, col. 7, lines 1-9.

The claimed generator connected to the memory for generating messages and menu displays using updated menu content information, such that the displays produce subscriber options for selection of other menu options and TV programs reads on Figs. 6-31 of Bennington. The additionally claimed subscriber interface in communication with the generator for selecting messages, menus and TV programs or for entry of subscriber inputs reads on the remote controls, disclosed in Fig. 3 & Fig. 4 and col. 8, lines 46-67 thru col. 9, lines 1-62.



As for the claimed tuner for tuning to one of the digitally compressed signals to produce a TV program, and regarding claim 8, which recites digital video data, Bennington discloses a tuner 28. Also, Bennington discloses that the input signal 11, which may include TV programs may originate from satellite transmission, which generally transmits video data in digital format. In any event, Official Notice is taken that transmission of digital video over a CATV system was known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to transmit video data over the CATV system of Bennington, at least for the known advantage transmitting more video data over the same bandwidth.

Considering claims 9 & 24, the second processor for processing the TV programs reads on the video display generator 23.

Considering claim 22-23, the claimed method for using an advanced STB with a TV delivery system, comprises steps that correspond with subject matter mentioned above in the rejection of claims 7-8, and is likewise treated.

5. Claims 10-15 & 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennington, in view of Handelman.

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Considering claims 10-11 & 25-26, Bennington discloses in Fig. 6 & Fig. 27 the subscriber receiving electronic messages, at least from the cable operator, but does not explicitly discuss e-mail services, per se. Nevertheless at the time the invention was made, it was well known in the art to combine e-mail service with a subscription TV service, as is shown by Handelman, (Abstract). Handelman discloses the use of telephone modem, (col. 8, lines 1-15). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Bennington so that e-mail services are included for the known advantage of increasing the usefulness of the subscription service.

Regarding claim 25, in Handelman the user receives and generates e-mail, see col. 8, lines 10-45. Moreover, the above-recited passages also disclose that e-mail is stored in memory. Handelman necessarily includes interactive programming instructions for controlling the subscribers' access to the e-mail; see col. 6, lines 58-64.

Considering claim 12, the claimed system to provide subscriber e-mail services with a remotely located computer system using a series of individual menus corresponds with subject matter mentioned above in the rejection of claim 10, and is likewise treated. As for the additionally claimed operations center generating menu control information in digitally compressed form, Bennington teaches that the EPG is transmitted as a data stream, which reads on a digital data stream. All additionally subject matter is necessarily included in the combination of Bennington and Handelman.

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Considering claim 13, the recited subject matter corresponds with claim 8 and is likewise treated.

Considering claim 14, the operation of the headend in Handelman reads on the recited subject matter.

Considering claim 15, the recited subject matter corresponds with claim 11 and is likewise treated.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Kauffman Teaches e-mail in a TV subscription service, col. 8, lines 25-31.

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**Any response to this action should be mailed to:**

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*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.  
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the  
organization where this application or proceeding is assigned is (703) 872-9314 for regular  
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
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